

ABSTRACT OF THE DISCLOSURE

1 A photovoltaic solid state relay has a light-emitting diode for emitting
2 light in response to an electrical control signal. First and second photovoltaic
3 devices are optically coupled to the light-emitting diode for converting the
4 light to first and second voltages, respectively. First and second unipolar
5 transistors are provided having first and second gate electrodes for
6 respectively receiving the first and second voltages and jointly establishing a
7 first current conducting path between output terminals to which a load
8 circuit will be connected. A bipolar transistor is provided having a base
9 connected to a junction between the first and second unipolar transistors for
10 establishing a second current conducting path in parallel to the first current
11 conducting path in one of opposite directions depending on voltages applied
12 to the output terminals.